



Tariffs Spark Fears of Rising Construction Costs: Could Investment in Technology be the Answer?

By Ian Shapiro

As U.S. trade policy decisions continue to dominate headlines, the uncertain future of high-demand import prices has business leaders and lawmakers anxious.

[Earlier this year](#), President Trump announced a 25 percent tariff on steel imports and a 10 percent tariff on aluminum imports that took effect on March 23. While the European Union (EU), Canada, and Mexico were granted a temporary reprieve, Trump declined to extend their exemption.

China was the first to implement retaliatory tariffs on U.S. exports, such as soybeans, planes, and cars. Since then, the U.S. [has been in talks with China](#) to de-escalate the situation, but no permanent solution has been reached. After their exemption expired, Mexico announced \$3 billion in tariffs against U.S. exports, including: pork, apples, potatoes, and bourbon. Canada and the EU both issued retaliatory tariffs as well.

While the stated objective of this trade policy is to “level the playing field” for American manufacturers—and many trade experts believe cheap imports have hurt the domestic steel industry—tariffs may have undesirable and unintended consequences that extend far beyond manufacturing. Many U.S. contractors rely on products comprised of foreign steel and aluminum, which are shipped in from all around the world.

Amid already rising material prices and skilled labor shortages, the tariffs could exacerbate existing unfavorable conditions in the construction sector. Despite these persistent issues, however, demand for new construction is high, as is the need to repair roads, bridges, pipelines, and other vitally important infrastructure. Addressing workforce challenges and minimizing costs is an important step for the construction sector to take full advantage of the potential offered by high demand for new projects.

Prevailing Winds in Construction

Over the past year, costs have steadily risen steadily for contractors [but haven't yet been passed along to their customers](#). More specifically, the producer price index for construction inputs rose 6.4 percent over the last 12 months, while the producer price index for what contractors charge has risen just 4.2 percent. Rising input costs and resulting higher prices will delay new infrastructure and development projects, as well as limit construction companies' ability to expand, hire and retain personnel, and make vital investments in new technologies and tools.

Contractors are already feeling the tariffs' effects, as their suppliers aren't sure how to hedge against the unpredictability of future prices. The outcome of renegotiated trade agreements, such as NAFTA, and other geopolitical events may also add to the uncertainty.

Labor Shortages

For years, the construction industry has warned that [skilled labor shortages are hindering productivity](#) despite an otherwise positive industry outlook. In fact, the [sector lost 2.3 million jobs](#) between 2006 and 2011.

While the demand for skilled craftspeople has continually increased, [fewer young people are entering the industry](#). Potential recruits just don't see it as an attractive and viable career option, especially when other sectors are better known for being tech-savvy and offer perks that appeal to millennial workers.

Clearly, construction companies need to address the skilled-labor gap, and soon. Luckily, now is the perfect time to invest, and the two places to make these investments are clear: tech and people.



Why tech?

New technologies, such as 3D modeling, virtual reality, machine monitoring, big data and analytics, robotics, and artificial intelligence can provide significant value to construction sector.

The confluence of these innovations—otherwise called the fourth industrial revolution—have the potential to streamline operations and decrease costs from the blueprint to the final product.

For instance, 3D modeling and virtual reality can be deployed to ensure crystal-clear communication between architects, engineers, and project managers. Self-driving and operating machinery [could allow projects to continue work overnight](#) with limited human oversight and remove workers from otherwise dangerous jobs. There have even been [trial productions of 3D-printed homes](#), which were created in just 24 hours.

The long term and practical applications of 3D printing in residential construction remain to be seen, but the possibilities are clear. Components previously imported from around the world can now be produced domestically, even on site. These printed materials might be a way to minimize the financial impact in the event future tariffs are enacted.

Such innovations could at least partially alleviate the skilled-labor and costly material woes of the sector, but technology only goes so far.

Why people?

Skilled workers will always be in high-demand, but autonomous machinery can augment human labor to increase safety, speed and efficiency. Construction companies need to ensure that they match their investments in technology with investment in their own workforce. The construction industry has a workforce that skews older, so retraining initiatives will likely take first priority. The key to any digital transformation initiative is organizational buy-in. Companies need to foster cultures of continuous improvement, experimentation, and willingness to fail-fast to take full advantage of new technologies and make discoveries.

Aside from internal education and retraining, the key to a sustainable business is a strong talent pipeline. Construction companies need to make a compelling case for more people to pursue careers in the sector and demonstrating a commitment to new technology and innovation is central to attracting the next generation of workers.

Why now?

With building material costs on the rise and tariffs sparking fears of further increases, contractors that harness new technology will be better positioned to take advantage of the high demand for new construction projects.

Tax reform also presents key opportunities for the sector. Companies need to undertake a thorough study of the new rules and of their own accounting and business strategies to determine what changes need to be made. Most notably, [the reduction in the corporate tax rate](#) will free up much-needed capital that companies should choose to invest where it counts.

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